



Dart Aerospace Ltd.  
1270 Aberdeen St  
Hawkesbury, ON  
K6A 1K7  
Canada

Tel (613) 632-5200

**D4088-043**

**Job Sheet 173386**



**Part No:** D4088-043

**Job Qty:** 5 ea

**Part Name:** Shoulder Harness



**Part Weight:** 0 lbs

**Status:** Scheduled

**Priority:** Medium

**Job Created:** 3/1/18

**Job Tracking No:**

**Due Date:** 3/28/18

**Created By:** Chantal Lavoie

**Type:** Stock

**Description:**

**Note:** DWG REV B SHEET 2 IPP REV:A NEW ISSUE DD 10.04.29 VERIFIED:EC

**Ship Via:**

### Bill of Materials

### Job Routing

| Op No | Operation  | Qty   | Start Date | Due Date | Standard  |         | Workcenter/Supplier   |           | Sign-off    |
|-------|------------|-------|------------|----------|-----------|---------|-----------------------|-----------|-------------|
|       |            |       |            |          | Setup hrs | Run Hrs | Workcenter / Supplier | Lead Time |             |
| 100   | Purchasing | 5 pcs |            | 3/28/18  | 0.00      | 0.00    | Purchasing            |           | AC 18/03/17 |
| 110   | Packaging  | 5 pcs |            | 3/28/18  | 0.00      | 0.00    | Packaging2            |           | AC 18/03/17 |
| 120   | QC         | 5 pcs |            | 3/28/18  | 0.00      | 0.00    | QC6                   |           | AC 18/03/17 |
| 130   | Packaging  | 5 pcs |            | 3/28/18  | 0.00      | 0.00    | Packaging3-2          | 470       | AC 18/03/17 |
| 140   | QC21-SA    | 5 Ea  |            | 3/28/18  | 0.00      | 0.00    | QC21                  |           | AC 18/03/17 |

Part Op 100 - Issue P/O: 039159 Manufacture D4088-043 as per Dwg D4088  
Descriptions: 120 - ensure buckle engages and dis-engages correctly for every unit.

MAR 01 2018

0.05

### Job BOM

| Part / Item     | Component Name             | Quantity     | Operation      | Container |
|-----------------|----------------------------|--------------|----------------|-----------|
| 3221-1-021-2396 | Shoulder Harness D4088-043 | 5 pcs (1 ea) | 100-Purchasing | 5055569   |

### Job Allocations

| Operation      | Component Part  | Required | Inventory | Allocated |
|----------------|-----------------|----------|-----------|-----------|
| 100-Purchasing | 3221-1-021-2396 | 5        | 0         | 0         |

### Part Specifications

Specifications could not be found.

Plex 3/1/18 12:58 PM dart.lavoie.chantal



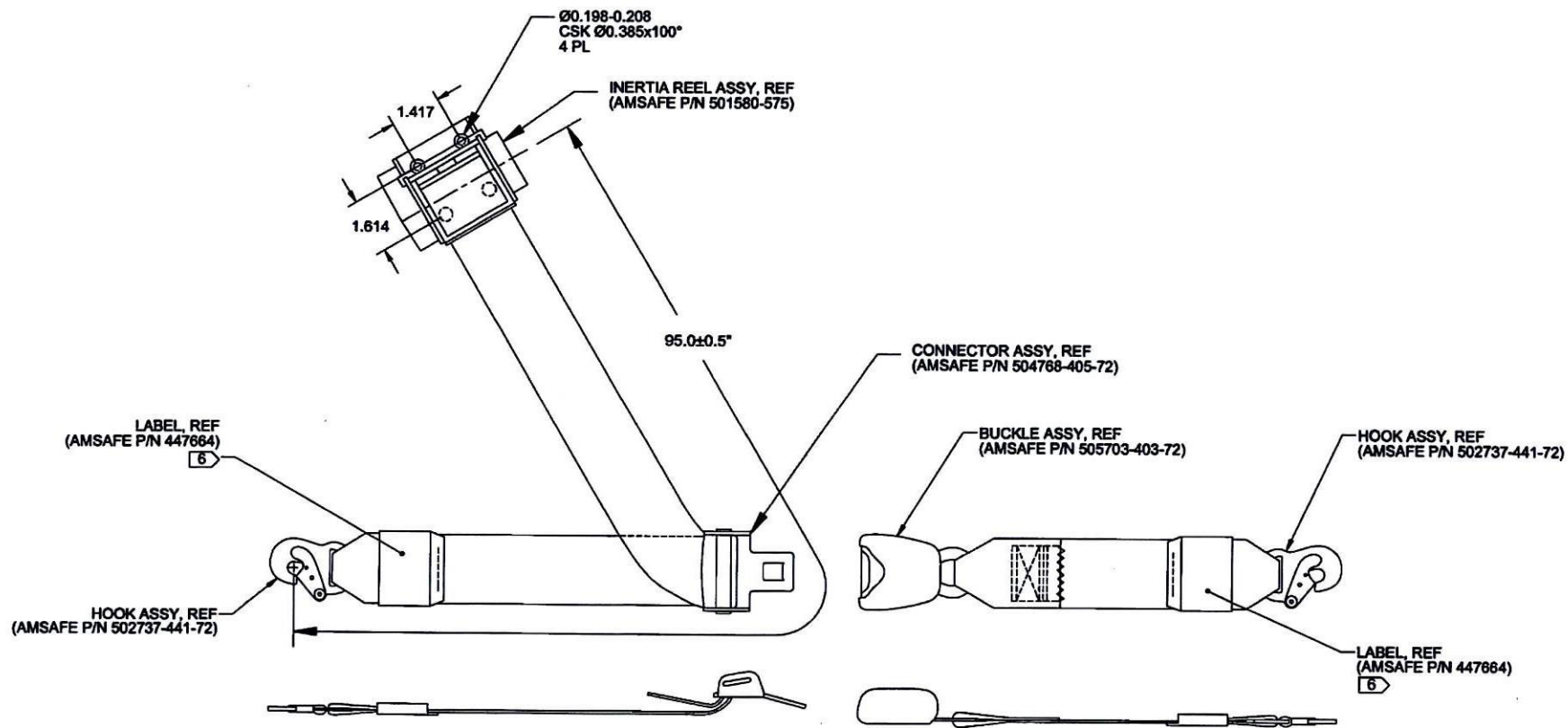
Shoulder Harness

**PART NO:** D4088 - 043  
**Serial No/Batch:** S055598  
**Revision:**  
**Operation:**  
**Change No:**

**Packaging**

Mfg Date: 03/27/18  
Job No: 173386

# SPECIFICATION CONTROL DRAWING



## D4088-041 SHOULDER HARNESS

### NOTES:

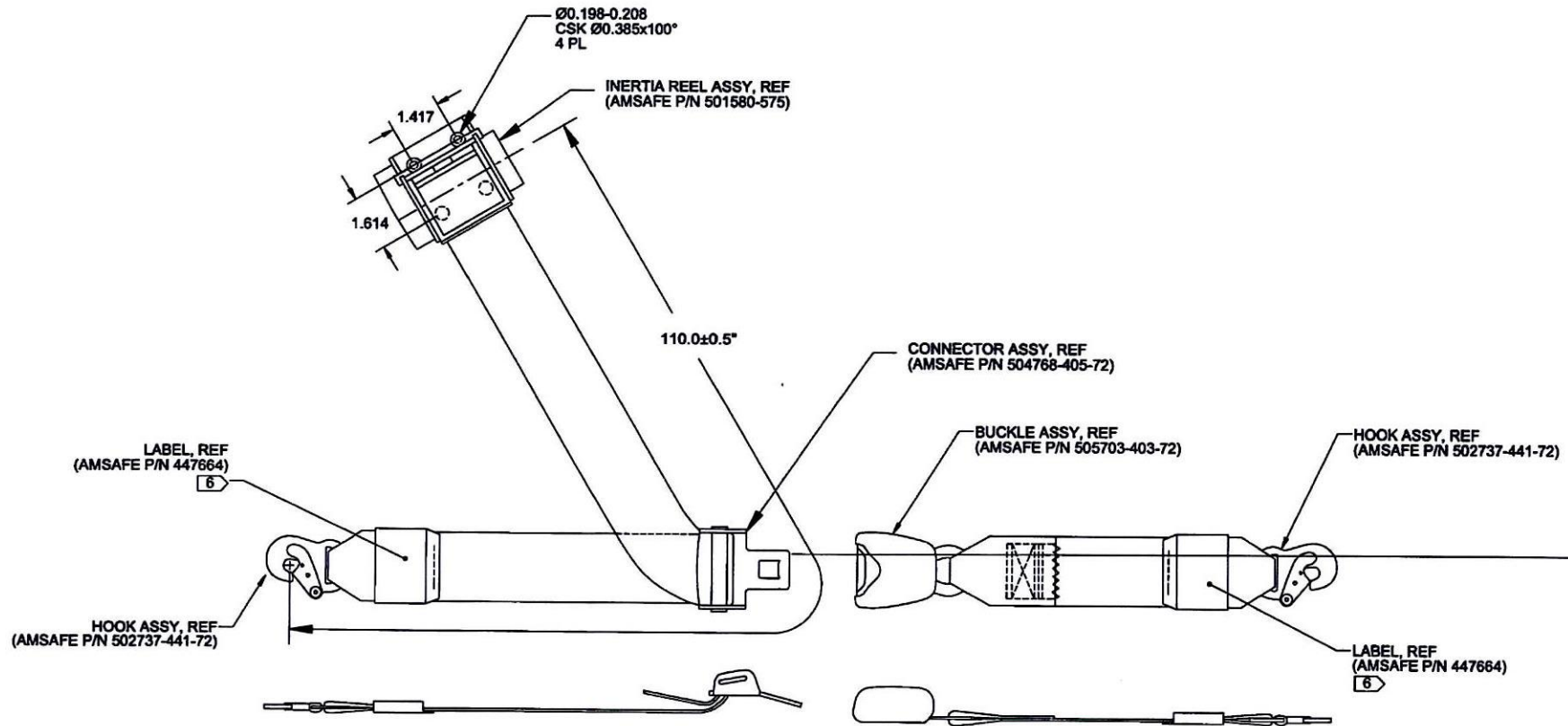
- 1) MATERIAL: AMSAFE INC. P/N 3221-1-011-2396  
3 POINT SHOULDER HARNESS WITH PUSH BUTTON BUCKLE  
MEETS REQUIREMENTS OF TSO-C114  
CHROME HARDWARE PLATING AND BLACK WEBBING
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: LABEL TO CONTAIN THE FOLLOWING AT MINIMUM:  
PART NUMBER 3221-1-011-2396  
CUST P/N: D4088-041  
RATED: 3000 LBS DATE OF MFG:  
CONFORMS TO TSO-C114
- 7) WEIGHT: 1.5 lbs

| B          | ADD D4088-045/047 (REASON: CIR 15-62) | JMH                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 17.01.31 |
|------------|---------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| A          | NEW ISSUE                             | CP                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 10.03.16 |
| REV.       | DESCRIPTION                           | BY                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | DATE     |
| DESIGN     | CP                                    | <b>DART AEROSPACE LTD</b><br>HAWKESBURY, ONTARIO, CANADA<br><br>DRAWING NO. <b>D4088</b> REV. B<br>SHEET 1 OF 4<br>TITLE <b>SHOULDER HARNESS</b> SCALE NTS<br><small>COPYRIGHT © 2018 BY DART AEROSPACE LTD<br/> THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL, AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS<br/> NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT<br/> WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small> |          |
| DRAWN      | JMH                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |          |
| CHECKED    | ML                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |          |
| MFG. APPR. | JLM                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |          |
| APPROVED   | HS                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |          |
| DE APPR.   | DS                                    | DATE <b>17.01.31</b>                                                                                                                                                                                                                                                                                                                                                                                                                                               |          |

RELEASED  
2017-03-06  
EIN 17-533

APPROVED

# SPECIFICATION CONTROL DRAWING



## D4088-043 SHOULDER HARNESS

### NOTES:

- 1) MATERIAL: AMSAFE INC. P/N 3221-1-021-2396  
3 POINT SHOULDER HARNESS WITH PUSH BUTTON BUCKLE  
MEETS REQUIREMENTS OF TSO-C114  
CHROME HARDWARE PLATING AND BLACK WEBBING
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: LABEL TO CONTAIN THE FOLLOWING AT MINIMUM:  
PART NUMBER 3221-1-021-2396  
CUST P/N: D4088-043  
RATED: 3000 LBS DATE OF MFG:  
CONFORMS TO TSO-C114
- 7) WEIGHT: 1.5 lbs

RELEASED  
2017-03-06

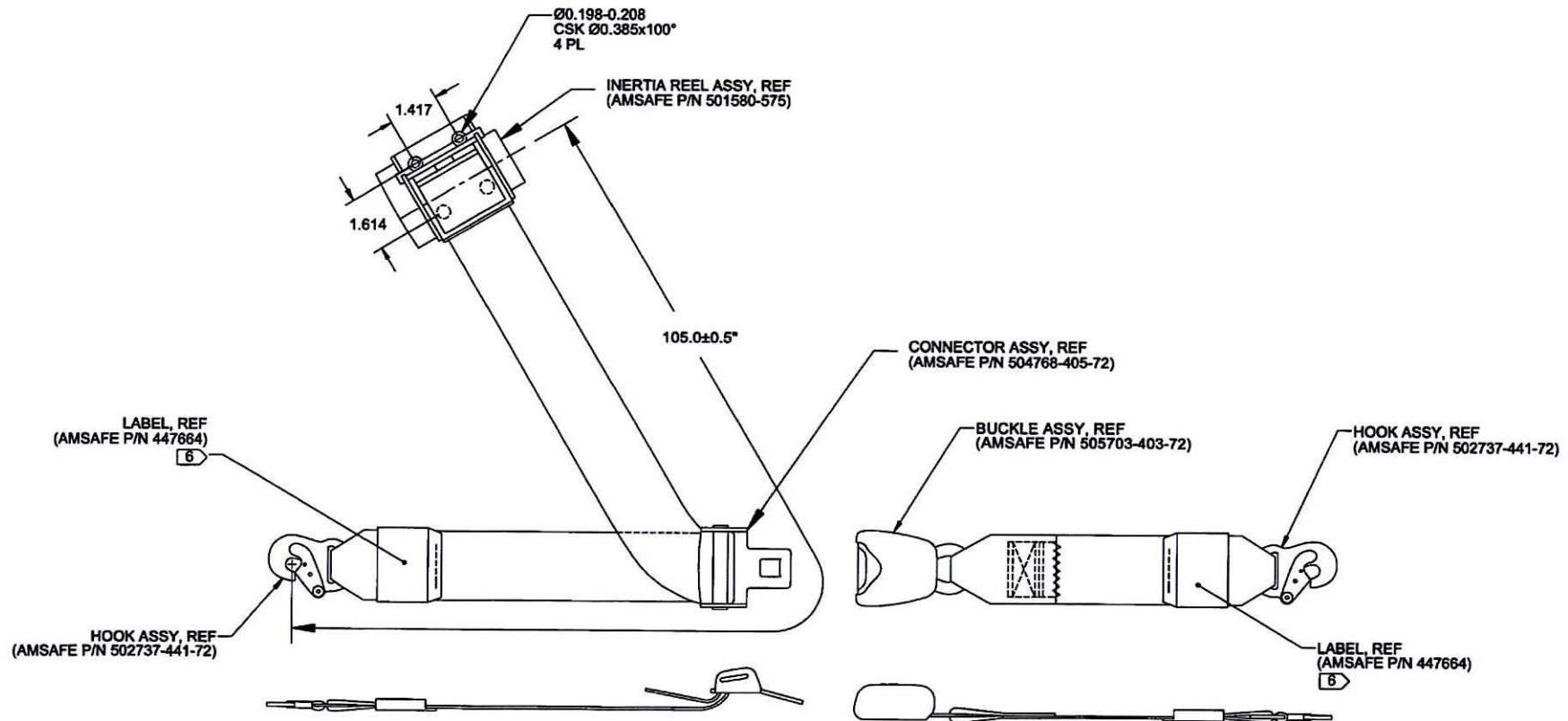
APPROVED

|            |          |                                                          |                        |
|------------|----------|----------------------------------------------------------|------------------------|
| DESIGN     | CP       | <b>DART AEROSPACE LTD</b><br>HAWKESBURY, ONTARIO, CANADA |                        |
| DRAWN      | JMH      |                                                          |                        |
| CHECKED    | ML       | DRAWING NO.<br><b>D4088</b>                              | REV. B<br>SHEET 2 OF 4 |
| MFG. APPR. | JLM      | TITLE<br><b>SHOULDER HARNESS</b>                         |                        |
| APPROVED   | HS       |                                                          |                        |
| DE APPR.   | DS       | SCALE<br>NTS                                             |                        |
| DATE       | 17.01.31 |                                                          |                        |

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# SPECIFICATION CONTROL DRAWING



## D4088-045 SHOULDER HARNESS

### NOTES:

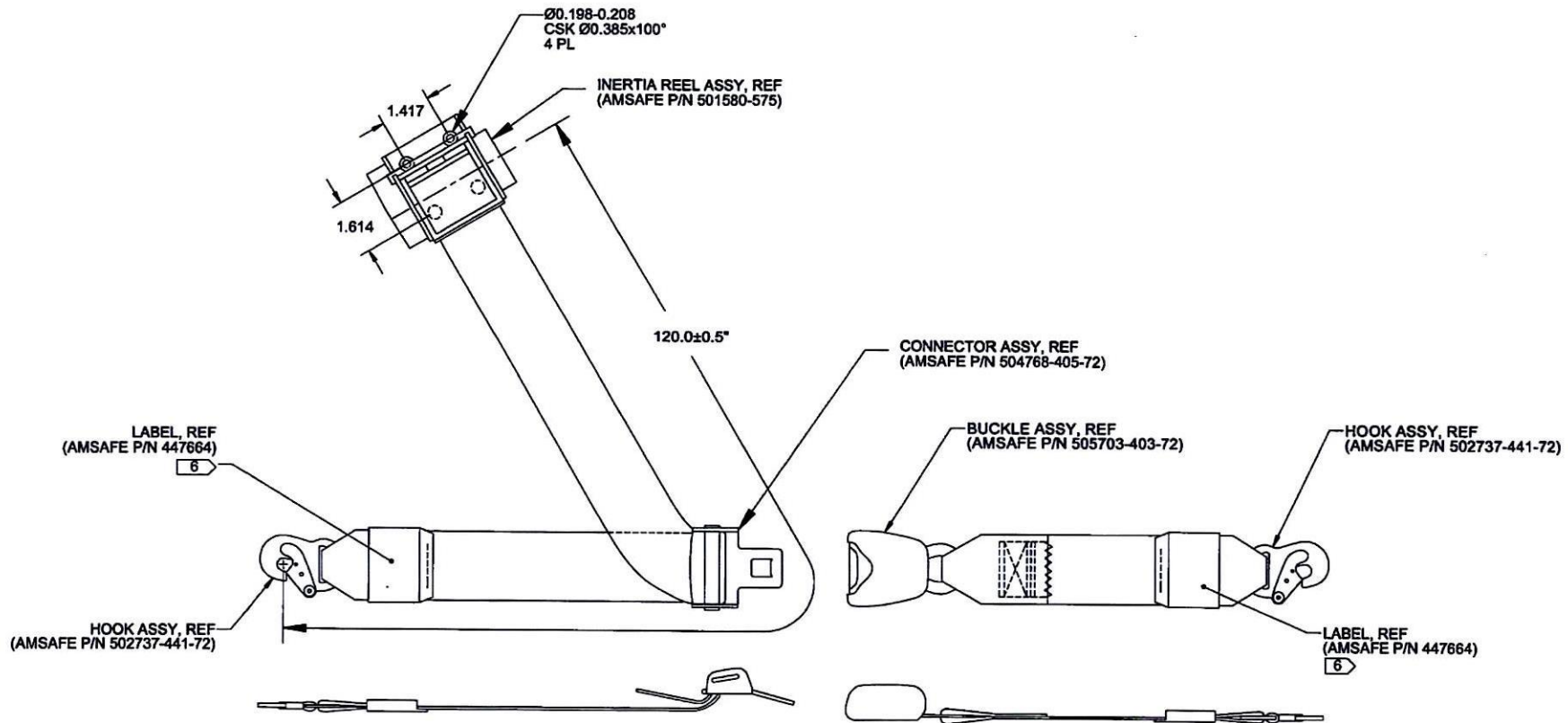
- 1) MATERIAL: AMSAFE INC. P/N 3221-1-051-2396  
3 POINT SHOULDER HARNESS WITH PUSH BUTTON BUCKLE  
MEETS REQUIREMENTS OF TSO-C114  
CHROME HARDWARE PLATING AND BLACK WEBBING
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: LABEL TO CONTAIN THE FOLLOWING AT MINIMUM:  
PART NUMBER 3221-1-051-2396  
CUST P/N: D4088-045  
RATED: 3000 LBS DATE OF MFG:  
CONFORMS TO TSO-C114
- 7) WEIGHT: 1.5 lbs

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2017-03-06

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|            |          |                                                                                                                                                                                                                                                                               |              |
|------------|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|
| DESIGN     | CP       | DART AEROSPACE LTD<br>HAWKESBURY, ONTARIO, CANADA                                                                                                                                                                                                                             |              |
| DRAWN      | JMH      |                                                                                                                                                                                                                                                                               |              |
| CHECKED    | ML       | DRAWING NO.                                                                                                                                                                                                                                                                   | REV. B       |
| MFG. APPR. | JLM      | D4088                                                                                                                                                                                                                                                                         | SHEET 3 OF 4 |
| APPROVED   | HS       | TITLE                                                                                                                                                                                                                                                                         | SCALE        |
| DE APPR.   | DS       | SHOULDER HARNESS                                                                                                                                                                                                                                                              | NTS          |
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# SPECIFICATION CONTROL DRAWING



**D4088-047 SHOULDER HARNESS**

## NOTES:

- 1) MATERIAL: AMSAFE INC. P/N 3221-1-061-2396  
3 POINT SHOULDER HARNESS WITH PUSH BUTTON BUCKLE  
MEETS REQUIREMENTS OF TSO-C114  
CHROME HARDWARE PLATING AND BLACK WEBBING
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: LABEL TO CONTAIN THE FOLLOWING AT MINIMUM:  
PART NUMBER 3221-1-061-2396  
CUST P/N: D4088-047  
RATED: 3000 LBS DATE OF MFG:  
CONFORMS TO TSO-C114
- 7) WEIGHT: 1.5 lbs

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2017-03-06

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|            |          |                                                                                                                                                                                                                                                                                                  |              |
|------------|----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|
| DESIGN     | CP       | <b>DART AEROSPACE LTD</b>                                                                                                                                                                                                                                                                        |              |
| DRAWN      | JMH      | HAWKESBURY, ONTARIO, CANADA                                                                                                                                                                                                                                                                      |              |
| CHECKED    | ML       | DRAWING NO.                                                                                                                                                                                                                                                                                      | REV. B       |
| MFG. APPR. | JLM      | <b>D4088</b>                                                                                                                                                                                                                                                                                     | SHEET 4 OF 4 |
| APPROVED   | HS       | TITLE                                                                                                                                                                                                                                                                                            | SCALE        |
| DE APPR.   | DS       | <b>SHOULDER HARNESS</b>                                                                                                                                                                                                                                                                          | NTS          |
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Dart Aerospace Ltd.  
1270 Aberdeen St  
Hawkesbury, ON  
K6A 1K7  
Canada

Tel (613) 632-5200

# **PURCHASE ORDER** **PO039159**

**Supplier:** AMS002-VU  
Amsafe Inc.  
1043 North 47th Avenue  
Phoenix, AZ 85043 USA  
Phone: 602 850 2850  
Fax: 602-278-3479

**PO No:** PO039159

**PO Date:** 3/1/18

**Due Date:** 3/28/18

**Purchase Order**

**Revision:**

**Revision Date:**

**Ship-To Contact:** Baker, Diane  
dbaker@dartaero.com

**Ship To:** 1270 Aberdeen Street  
Hawkesbury  
ON  
K6A 1K7 Canada  
Phone: 613-632-5200

**Via:** Ground

**Pymt Terms:** Net 30

**Freight Terms:**

**Special Comments:**

REVISED

\$

E-MAILED

MAR 08 2018

## **Items**

| Line Item                  | Part            | Supplier Part No | Item No | Description                                                                  | Status | Due Date | Order Quantity | Received Quantity | Balance | Unit Price (USD) | Extended Price |
|----------------------------|-----------------|------------------|---------|------------------------------------------------------------------------------|--------|----------|----------------|-------------------|---------|------------------|----------------|
| 1                          | 4192-1-021-2396 |                  |         | Harness Assembly D4387-041<br>As Per Dwg DSC-D4387 Rev. D                    | Firmed | 3/28/18  | 6 pcs          | 0 pcs             | 6 pcs   | \$316.55/pcs     | \$1,899.30     |
| Line Item Note job# 173383 |                 |                  |         |                                                                              |        |          |                |                   |         |                  |                |
| 2                          | 3221-1-011-2396 |                  |         | Shoulder Harness D4088-041<br>As per Dwg D4088 Rev. B                        | Firmed | 3/28/18  | 12 pcs         | 0 pcs             | 12 pcs  | \$367.36/pcs     | \$4,408.32     |
| Line Item Note job# 173385 |                 |                  |         |                                                                              |        |          |                |                   |         |                  |                |
| 3                          | 4147-2-041-2396 |                  |         | Shoulder Harness, 4 Point D4071-041<br>As per Dwg D4071 Rev. A               | Firmed | 3/28/18  | 4 pcs          | 0 pcs             | 4 pcs   | \$388.09/pcs     | \$1,552.36     |
| Line Item Note job# 173387 |                 |                  |         |                                                                              |        |          |                |                   |         |                  |                |
| 4                          | 3221-1-021-2396 |                  |         | Shoulder Harness D4088-043<br>As per Dwg 4088 Rev. B                         | Firmed | 3/28/18  | 5 pcs          | 0 pcs             | 5 pcs   | \$367.36/pcs     | \$1,836.80     |
| Line Item Note job# 173386 |                 |                  |         |                                                                              |        |          |                |                   |         |                  |                |
| 5                          | 4181-2-191-2396 |                  |         | Shoulder Harness W/ Buckle Assembly D4305-041<br>As Per Dwg DSC-D4305 Rev. E | Firmed | 3/28/18  | 4 pcs          | 0 pcs             | 4 pcs   | \$860.46/pcs     | \$3,441.84     |
| Line Item Note job# 173394 |                 |                  |         |                                                                              |        |          |                |                   |         |                  |                |
| 6                          | D3636-041P      |                  |         | Shoulder Harness As per Dwg D3636-041 Rev.B<br>AMSAFE PART # 3104-1-061-2396 | Firmed | 3/28/18  | 12 pcs         | 0 pcs             | 12 pcs  | \$417.37/pcs     | \$5,008.44     |
| Line Item Note job# 173395 |                 |                  |         |                                                                              |        |          |                |                   |         |                  |                |

**Grand Total: \$18,147.06**

## **Order Notes**





- \*Conforms to all applicable drawing dimensions and specifications.
- \*(If applicable) Meets the requirements of FAR 25.853 (a) Compartment Interiors.
- \*(If applicable) Conforms to British CAA specifications.
- \*(If applicable) All parts/materials are certified new, conform to the design data, and are in airworthy condition.
- \*Meets all the requirements of TSO-C114.
- \*The parts/materials reflected herein were produced under a FAA approved Manufacturing and Quality Assurance system/methods as set in FAR Part 21 Sub-Part O, Para. 21.601.
- \*The conditions and tests required for TSO approval of this article are minimum performance standards.
- \*It is the responsibility of those installing this article either on or within a specific type or class of aircraft to determine that the aircraft installation conditions are within the TSO standard.
- \*TSO articles must have separate approval for installation in an aircraft. The article may be installed only if performed under 14 CFR part 43 or applicable airworthiness requirements.
- \*For the latest copy of the CMM/SMM, please log onto [www.amsafeaviation.com](http://www.amsafeaviation.com)

|                |                |                 |         |
|----------------|----------------|-----------------|---------|
| CUSTOMER NAME: | DART AEROSPACE | SALES ORDER NO. | S379361 |
|----------------|----------------|-----------------|---------|

| Line | Purchase Order No. | Am-safe Part No. | Rev. | Lot No. | Customer Part No. | Dated Code | Quantity |
|------|--------------------|------------------|------|---------|-------------------|------------|----------|
| 4    | PO039159           | 3221-1-021-2396  | D    | NIA     | NONE              | A0318      | 5        |

This document is the property of the customer and should remain with the articles listed above.  
**PLEASE DELIVER TO THE QUALITY ASSURANCE DEPARTMENT**

## NEW

*Alexandra Coxson*  
QUALITY ASSURANCE REPRESENTATIVE

3/16/18  
DATE

## CUSTOMER



|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                    |                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                       |                  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|-----------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------|------------------|
| 1. Approving Civil Aviation Authority/Country:<br><br>FAA/United States                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                    | 2. <b>AUTHORIZED RELEASE CERTIFICATE</b><br>FAA Form 8130-3, AIRWORTHINESS APPROVAL TAG |                                                                                                                                                                                                                                                                                                                                                                                                                   | 3. Form Tracking Number:<br><br>S379361 - 4 <i>JM</i> |                  |
| 4. Organization Name and Address:<br><b>AmSafe, Inc.</b><br>1043 North 47th Avenue<br>Phoenix, Arizona 85043                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                    |                                                                                         | 5. Work order/Contract/Invoice Number: <b>S379361 - 4</b><br>PAGES ATTACHED <i>10</i>                                                                                                                                                                                                                                                                                                                             |                                                       |                  |
| 6. Item:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 7. Description:    | 8. Part Number:                                                                         | 9. Quantity:                                                                                                                                                                                                                                                                                                                                                                                                      | 10. Serial Number:                                    | 11. Status/Work: |
| 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | REST SYS ASSY W/IR | 3221-1-021-2396                                                                         | 5                                                                                                                                                                                                                                                                                                                                                                                                                 | <i>N/A</i>                                            | NEW              |
| 12. Remarks: Drawing: <b>3221</b><br>Rev: <b>D</b><br>TSO: <b>TSO-C114</b><br>DATE CODE: <i>A0318</i><br>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                    |                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                       |                  |
| 13a. Certifies the items identified above were manufactured in conformity to:<br><br><input checked="" type="checkbox"/> Approved design data and are in a condition for safe operation<br><br><input type="checkbox"/> Non-approved design data specified in Block 12.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                    |                                                                                         | 14a. <input type="checkbox"/> 14 CFR 43.9 Return to Service <input type="checkbox"/> Other regulation specified in Block 12<br><br>Certifies that unless otherwise specified in Block 12, the work identified in Block 11 and described in Block 12 was accomplished in accordance with Title 14, Code of Federal Regulations, part 43 and in respect to that work, the items are approved for return to service. |                                                       |                  |
| 13b. Authorized Signature:<br><i>Jackeline Melchor</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                    | 13c. Approval/Authorization No.:<br><b>ODA602112NM</b>                                  |                                                                                                                                                                                                                                                                                                                                                                                                                   | 14b. Authorized Signature                             |                  |
| 13d. Name (typed or printed)<br><b>JACKELINE MELCHOR</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                    | 13e. Date (dd/mm/yyyy):<br><i>20/MAR/2018</i>                                           |                                                                                                                                                                                                                                                                                                                                                                                                                   | 14c. Authorized/Certificate No.                       |                  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                    |                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                   | 14d. Names (typed or printed)                         |                  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                    |                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                   | 14e. Date (dd/mm/yyyy):                               |                  |
| <b>User/Installer Responsibilities</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                    |                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                       |                  |
| <p>It is important to understand that the existence of this document alone does not automatically constitute authority to install the aircraft engine/propeller/article.</p> <p>Where the user/installer performs work in accordance with the national regulations of an airworthiness authority different than the airworthiness authority of the country specified in Block 1, it is essential that the user/installer ensures that his/her airworthiness authority accepts aircraft engine(s)/propeller(s)/article(s) from the airworthiness authority of the country specified in Block 1.</p> <p>Statements in Blocks 13a and 14a do not constitute installation certification. In all cases, aircraft maintenance records must contain an installation certification issued in accordance with the national regulations by the user/installer before the aircraft may be flown.</p> |                    |                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                       |                  |